To the Claims:

Claim 1. (Currently amended) A ~~driving circuit used for a~~ current-driven active matrix organic light emitting diode pixel (AMOLED pixel), comprising:

an organic light emitting diode (OLED) having an anode and a cathode connected to a first power source;

a driving thin film transistor;

a capacitor having a first end connected to a gate of the driving thin film transistor and a second end connected to a second power source;

a first switch having one end connected to the anode of the OLED and another end connected to a drain of the driving thin film transistor;

a second switch having one end connected to a current source and another end connected to the drain of the driving thin film transistor;

a third switch having one end connected to the drain of the driving thin film transistor and another end connected to the gate of the driving thin film transistor and the first end of the capacitor; and

~~a pixel connected to a current source, the current source being used to charge or discharge a capacitor connected to a gate of a driving thin film transistor, and a gray scale of the pixel is determined by a magnitude of a current provided by the current source; and~~

a pre-charge switch directly connected to the gate of the driving thin film transistor and a driving power source, wherein the pre-charge switch controls ~~for controlling~~ the driving power source to pre-charge the capacitor before the current source

charges or discharges the capacitor. ~~, wherein the pixel comprises:~~

~~an organic light emitting diode (OLED) having an anode and a cathode, the cathode being connected to a first power source;~~

~~a first switch with one end connected to the anode of the OLED and another end connected to a drain of the driving thin film transistor;~~

~~a second switch with one end connected to the current source and another end connected to the drain of the driving thin film transistor; and~~

~~a third switch with one end connected to the drain of the driving thin film transistor and another end connected to the gate of the driving thin film transistor and one end of the capacitor, the other end of the capacitor being connected to a second power source.~~

Claims 2-6 (cancelled)

Claim 7. (Currently amended) The current-driven AMOLED pixel ~~driving circuit~~ of claim 1, wherein each of the first switch, the second switch, the third switch ~~switches~~, the driving thin film transistor, and the pre-charge switch is a thin film transistor having a P-type doped channel ~~are P-type thin film transistors~~.

Claim 8. (Currently amended and withdrawn) The current-driven AMOLED pixel ~~driving circuit~~ of claim 1, wherein each of the first switch, the second switch, the

third switch ~~switches~~, the driving thin film transistor, and the pre-charge switch is a thin film transistor having a N-type doped channel ~~are N-type thin film transistors~~.

Claim 9. (Currently amended) The current-driven AMOLED pixel ~~driving circuit~~ of claim 1, wherein ~~a negative power source is used as~~ the driving power source is a negative power source.

Claim 10. (Currently amended) The current-driven AMOLED pixel ~~driving circuit~~ of claim 1, wherein a voltage difference between the first end and the second end of the capacitor ~~pre-charged voltage level across the capacitor~~ is ~~substantially~~ equal to a threshold voltage of the driving thin film transistor.

Claim 11. (Original) The current-driven AMOLED pixel ~~driving circuit~~ of claim 1, wherein the driving power source comprises two different voltage levels.

Claim 12. (Currently amended and withdrawn) A method for driving a current-driven active matrix organic light emitting diode (AMOLED) pixel, wherein a pre-charge switch is disposed between a driving thin film transistor of the AMOLED pixel and a driving power source and directly connected to the gate of the driving thin film transistor, a capacitor is directly connected to the gate of the driving thin film transistor of the AMOLED pixel, the method comprising ~~the steps of~~:

directly pre-charging the capacitor through the pre-charge switch by using the driving power source;

adjusting a gray-scale charging voltage of the capacitor by charging or discharging the capacitor using a current source; and

stopping charging or discharging the capacitor through the current source to control the AMOLED pixel to enter an illumination stage.

Claim 13. (Currently amended and withdrawn) The method of claim 12, wherein the capacitor is pre-charged to a voltage that is ~~substantially~~ equal to a threshold voltage of the driving thin film transistor.

Claim 14. (Withdrawn) The method of claim 12, wherein the driving power source comprises two different voltage levels.

Claim 15. (Currently amended) The AMOLED pixel ~~driving circuit~~ of claim 1, wherein the first power source is of negative polarity.

Claim 16. (Currently amended) The AMOLED pixel ~~driving circuit~~ of claim 1, wherein the second power source is of positive polarity.